

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 8/23/18 **ONSITE SEWAGE DISPOSAL SYSTEM** P 563990
 APPROVAL DATE: 10/16/2018 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 13185 Highland Road
 SUBDIVISION: Sullivan Property LOT: 2 TAX ID: 05-368561
 CONTRACTOR: Fogle's Septic Clean, Inc. EMAIL: kurt@foglesinc.com
 CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Patricia Sullivan EMAIL: _____
 OWNER ADDRESS: 3010 N. Ridge Road, C709, Ellicott City, MD 21043 PHONE: 443-717-2856

BAT UNIT MODEL: Hoot H-600 BNR PUMP SIZE: _____ PUMP TANK CAPACITY: _____

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: _____ DATE RECORDED: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 3 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>100</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>

LOCATION: **PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**

NOTES: Install 2 x 50' trenches.

ISSUED BY: Sarah Collins ISSUE DATE: 9/14/18 EXPIRATION DATE: 9/14/19

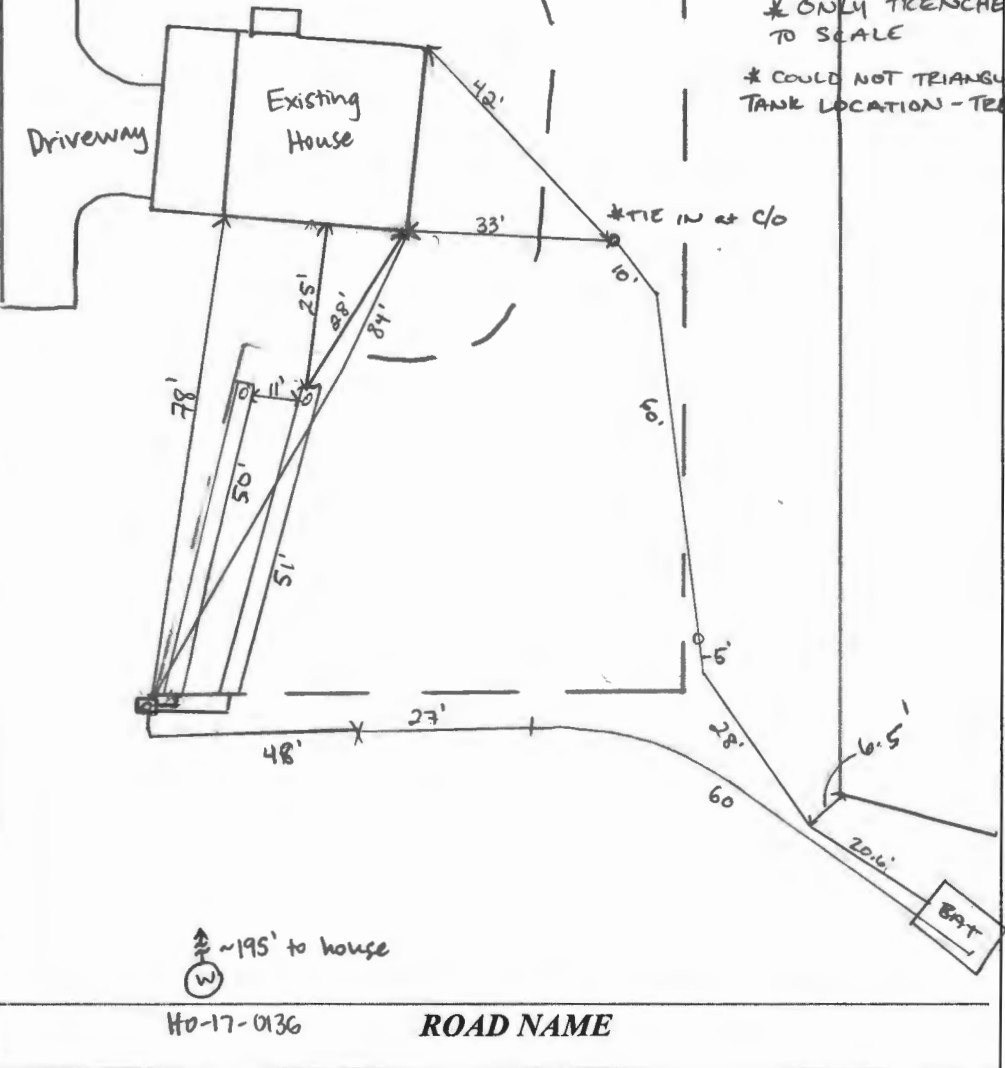
- NOTE: **CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION**
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: **AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM**
 ELECTRICAL PERMIT ISSUED E _____
- NOTE: **AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.**
- NOTE: **MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA**

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

NOT TO SCALE

1" = 30'

* ONLY TRENCHES TO SCALE
* COULD NOT TRIANGULATE TANK LOCATION - TREES



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	4'	8'
NUMBER OF TRENCHES <u>2</u>		
TOTAL LENGTH <u>100'</u>		
ABSORPTION AREA <u>200 ft²</u>		
DISTRIBUTION BOX LEVEL <u>N/A</u>		
DISTRIBUTION BOX BAFFLE <u>YES</u>		
DISTRIBUTION BOX PORT <u>YES</u>		

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	
MANUFACTURER	<u>MAYER BROS</u>
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	_____
BAFFLES	_____
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	_____
SLOTTED	_____
DATE ON LID	_____
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	_____
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	_____
BAFFLES	_____
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	_____
SLOTTED	_____
DATE ON LID	_____

HOOT H-600 BNE

PRE-CONSTRUCTION:

9/17/18 Met Fogle's, Mrs. Sullivan, and her son, John, on site for layout. Property corners, SDA corners, + BAT tank staked. Mrs. Sullivan would like to keep azalea bushes between SDA w/ initial system + house. OK to move D-box to corner farther from house. Shot contour + laid out 2 x 50' trenches. Pulled 100' off well, force main will be outside 100' arc. Existing tank + drywell must be pumped + abandoned. (SC)

INSTALLATION: 9/21/2018 (AM) TRENCHES IN PROGRESS OF CONSTRUCTION. (PM) TRENCHES COMPLETE. ~2 PERFORATIONS OF TRENCH LATERAL START BEFORE TRENCH AGGREGATE. TRENCHES WERE BACKFILLED IN CENTER AND COULD NOT REMEDIATE. (AM) 10/5/2018 (AM) TANK SET. INSTALLING HOUSE EFFLUENT LINE. (PM) FORCE MAIN COMPLETED AND HOUSE EFFLUENT LINE CONNECTED TO TANK. REINSPE P/A (AM) 10/15/2018 PUMP + ALARM. OK. RECEIVED CONFIRMATION OF AB. S.T. + D.W. LOCATION OF EX ST + D.W APPEARED TO BE BACKFILLED. (AM)

FINAL INSPECTOR

DATE OF APPROVAL

10/16/2018

Wolf, Kevin

From: Wolf, Kevin
Sent: Monday, September 10, 2018 10:54 AM
To: Rob Vogel (Rob.Vogel@timmons.com)
Cc: Patricia Sullivan (prsjfs@gmail.com); Jeremiah Reynolds (Jeremiah.Reynolds@timmons.com)
Subject: RE: 13185 Highland Road

Rob,

Few things on my review of lot 2 resubmittal that needs to be addressed:

- The **1st replacement system** should utilize a 0.6gpd/ft² loading rate instead of a 1.2 gpd/ft². The system is tailored more towards perc holes 111 and 110 based on current elevations and topography shown. The sidewall credit should also be changed to 3.5ft instead of 4ft. The design will be as follows:
 $450\text{gpd} \div 0.6\text{gpd/ft}^2 = 750\text{ ft}^2 \div 2 \text{ (trench Width)} = 375\text{ft} \times .40 \text{ (sidewall reduction for 3.5ft)} = \underline{150\text{ Linear feet}}$.
- In lieu of this change, please add another 50ft trench below the existing 2 x 50ft trenches already shown for the 1st replacement system.
- The trench detail section will need to be changed to reflect the new 2nd replacement trench spec's.
- The electric to the house must either be labeled "to be relocated in the future prior to installing the 2nd replacement system" or there must be a 5ft setback on both sides of the electric line that "*is to remain*" and labeled as such. If the electric line "*is to remain*", you will also need to revised the percolation certification plan to reflect this change in the SDA. Area would be deleted and added to part of the SDA (keeping the minimum 10,000sq ft area).
- The 2nd replacement system is shown going thru the existing electric line and the existing large trees which would need to be adjusted for the comment above; depending on which way you choose. Trees would need to be labeled "to be removed prior to installing 2nd replacement" or trenches relocated around them.
- You show an ex. electric line running parallel with the 'use-in-common'. I am not sure what this line is but the owner (Patricia Sullivan) has stated to me that this may be an old underground dog fence. This should be either removed or labeled as such.

The profiles and system design in itself look ok. Please make the necessary changes listed above and resubmit for approval. Let me know if you have any questions comments.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



kwolf@howardcountymd.gov

CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

From: Wolf, Kevin
Sent: Wednesday, August 29, 2018 4:04 PM
To: Rob Vogel (Rob.Vogel@timmons.com)
Cc: Patricia Sullivan (prsjfs@gmail.com)
Subject: 13185 Highland Road

Rob,

We attempted a pre-construction meeting onsite this morning with the septic contractor. Upon the inspection, I found a list of things that need to be considered for this septic installation to commence:

1. The SDA and lot lines were not staked
2. There is an existing gravel drive that is faintly shown on the OSDS plan that runs laterally next the distribution box. The elevation of the drive way has cut the grade down enough to alter the location of the trench # 2 running towards perc hole 108. This topo will need to be reflected on the OSDS plan (i.e. field-run may be required).
3. The initial system has 2 very large trees directly in the way of the location of the trenches. These trees need to be shown on the OSDS plan and labeled either "to remain" or "to be removed".
4. The main electric comes off a pole from the use-in-common to supply the house. This will need to be shown on the OSDS.
5. The OSDS plan shows an ejector pit inside the house. This does not exist as basement service is via gravity. The elevations and location of the BAT unit will not work at these elevations. You will need to coordinate with the owner on how you want to proceed (i.e. installation of an ejector pit as per the OSDS plan, or try and relocate the BAT w/a pump tank).

If you have any questions or concerns on this information, please contact me.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

Wolf, Kevin

From: Wolf, Kevin
Sent: Wednesday, August 29, 2018 4:04 PM
To: Rob Vogel (Rob.Vogel@timmons.com)
Cc: Patricia Sullivan (prsjfs@gmail.com)
Subject: 13185 Highland Road

Rob,

We attempted a pre-construction meeting onsite this morning with the septic contractor. Upon the inspection, I found a list of things that need to be considered for this septic installation to commence:

1. The SDA and lot lines were not staked
2. There is an existing gravel drive that is faintly shown on the OSDS plan that runs laterally next the distribution box. The elevation of the drive way has cut the grade down enough to alter the location of the trench # 2 running towards perc hole 108. This topo will need to be reflected on the OSDS plan (i.e. field-run may be required).
3. The initial system has 2 very large trees directly in the way of the location of the trenches. These trees need to be shown on the OSDS plan and labeled either "to remain" or "to be removed".
4. The main electric comes off a pole from the use-in-common to supply the house. This will need to be shown on the OSDS.
5. The OSDS plan shows an ejector pit inside the house. This does not exist as basement service is via gravity. The elevations and location of the BAT unit will not work at these elevations. You will need to coordinate with the owner on how you want to proceed (i.e. installation of an ejector pit as per the OSDS plan, or try and relocate the BAT w/a pump tank).

If you have any questions or concerns on this information, please contact me.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



kwolf@howardcountymd.gov

CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

Wolf, Kevin

From: Rob Vogel <Rob.Vogel@timmons.com>
Sent: Thursday, August 30, 2018 8:36 AM
To: John Hieatzman
Cc: Patricia Sullivan; Wolf, Kevin
Subject: RE: Sullivan Septic

We are aware of the depth issue. That is why we had gone with the hung sewer and ejector. But we are looking at the options.

From: John Hieatzman <john@foglesinc.com>
Sent: Thursday, August 30, 2018 8:34 AM
To: Rob Vogel <Rob.Vogel@timmons.com>
Cc: Patricia Sullivan <prsjfs@gmail.com>; Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: RE: Sullivan Septic

Hi Rob,

I talked with Kurt this morning and we don't think a HOOT tank will work to eliminate the hung sewer as it will be too deep in the ground and cannot have that much cover on it.

John Hieatzman
Fogle's Septic Clean, Inc.
410-795-5670

From: Patricia Sullivan [<mailto:prsjfs@gmail.com>]
Sent: Wednesday, August 29, 2018 5:09 PM
To: John Hieatzman <john@foglesinc.com>
Cc: Pat Sullivan <prsjfs@gmail.com>
Subject: Sullivan Septic

John
Here is Rob Vogel's response to Kevin Wolf.
Again please share with Kurt.
Any comments ?
Pat Sullivan

Sent from my iPad

Begin forwarded message:

From: Patricia Sullivan <prsjfs@gmail.com>
Date: August 29, 2018 at 4:50:06 PM EDT
To: Rob Vogel <Rob.Vogel@timmons.com>
Cc: Michael Sullivan <mike.sullivan@am.jll.com>, Jeremiah Reynolds <Jeremiah.Reynolds@timmons.com>, Ann Yingling <Ann.Yingling@timmons.com>, Christine Martin <cmrealestate7@gmail.com>, Pat Sullivan <prsjfs@gmail.com>
Subject: Re: Septic

Rob

You have my authorization to do what is necessary to complete this project.
Please have revised plan to Kevin on Friday since we have Labor Day weekend coming.
Pat Sullivan

Sent from my iPad

On Aug 29, 2018, at 4:42 PM, Rob Vogel <Rob.Vogel@timmons.com> wrote:

I spoke to Kevin Wolf. The following is a summary.

1. The septic was not staked out. No one had contacted us to perform that task.
2. We utilized Howard County GIS topography for perc test and certification plats.
3. Health wants the location of underground electric. Apparently there is some spray paint on the ground.
4. Health wants two trees located.
5. We will need to provide some field run topo to achieve this. Based on authorization we can have the crew on-site Thursday or Friday.
6. Since we cannot flow by gravity uphill from the current sewer exiting the building under the slab, we had proposed a "hung sewer" to serve the first floor and an ejector pump to serve the basement. We are going to attempt to use a HOOT BAT unit (#600) which has a pump to pump up to the trenches. That would eliminate the hung sewer
7. I told Kevin we would have a revised plan to him Friday or Monday.

We will proceed with these services upon your authorization.

Thanks, Rob

Robert H. Vogel P.E.,M.ASCE

VOGEL ENGINEERING + TIMMONS GROUP | www.timmons.com
3300 N. Ridge Road, Suite 110 | Ellicott City, MD 21043
Office: 410.461.7666 | Fax: 410.461.8961
<https://www.linkedin.com/company/timmons-group>
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#)



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

Maura J. Rossman, M.D., Health Officer

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 22nd day of August 2013, among Patricia Sullivan, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 13185 Highland Road, Highland, MD, in the 5th Election District of Howard County, Maryland, and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 34, Block # 21, Parcel # 237, Deed Reference # L15527 and Tax Account # 368561 ("the Property").
E.137

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective November 24, 2016. The pre-treatment device being installed is Norweco Low Profile Singular Bio-Kenetic Wastewater Treatment System (model INFLP-500 CPD)

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.
- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Property shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title to the Property, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed this agreement on the date indicated above.

Red [Signature] 8/22/18
Howard County Health Department

Patricia Sullivan 8/21/18
Owner #1 Signature Date

PATRICIA SULLIVAN
Owner #1 Print Name

Buyer #1 Signature Date

Buyer #1 Print Name

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21047
410-313-5850

```

=====
LR - Agreement Recording Fee
                               1x  20.00  20.00
Name: sullivan
Ref: 30

LR - Agreement Surcharge
                               1x  40.00  40.00
=====
SubTotal:                               60.00
Total:                                   60.00
=====
REV-Check-BOA                               60.00
Number : 6058

08/22/2018  12:54                               CC13-SB

```

Fogle's Septic Clean Inc.

Fogle's Portable Toilets • Fogle's Well Drilling LLC • Fogle's Excavating, LLC



October 17, 2018

Howard Co Dept of Environmental Health
8930 Stanford Blvd
Columbia, Md 21045

To Whom it may concern,

On October the 15th 2018 Fogle's Septic Clean Inc, has pumped, crushed and filled in the septic tank and drywell when do a septic repair located at 3185 Highland Rd for Pat Sullivan. The septic repair consisted of install a Hoot Pre-treatment tank and 2-50 ft trenches. If you have any questions please call me at the office 410-795-5670.

Sincerely,

Kim Fogle
Fogle's Septic Clean, Inc.



MAYER BROS., INC.

Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 13185 Highland Rd.
Highland, MD 2077

Date of Final Inspection: 10/15/18

Installer: Fogles Septic Clean

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

RS, Michael Dager
Name of Inspector
Mayer Bros., Inc.

PH: 410-796-1434

FX: 410-796-1438

WBE

www.mayerbrosprecast.com

Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors,
Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers,
Custom Precast Products

VOGEL ENGINEERING + TIMMONS GROUP

3300 North Ridge Road, Suite 110, Ellicott City, MD 21043
P 410.461.7666 F 410.461.8961 www.timmons.com

LETTER OF TRANSMITTAL

Date: August 9, 2018
To: Howard County Health Department
Attn: Mr. Hank Oswald
cc:
Subject: Sullivan Property
Project Number: 15-00.00

ATTACHED:

# Copies	Description
3	Onsite Sewage Disposal System Design Plan

Remarks:

Matthew Ahearn 

Transmitted by:

Received by:



Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Robert H. Vogel Engineering
8407 Main Street
Ellicott City, MD 21043

FROM: Hank Oswald, L.E.H.S.
Well & Septic Program

RE: OSDS Plan
Sullivan Property, Lot 2
13185 Highland Road

Date: August 20, 2018

The following comments pertain to the review of the septic plan for 13185 Highland Road, Sullivan Property, Lot 2:

- 1.) Lots 2 and 3 are required to have a pretreatment unit utilizing best available technology.
- 2.) Include all BAT site plan notes (See attached BAT Plan Requirements)
- 3.) Complete operation & maintenance agreement, submit for signature then record at Land Records.
(See attached Agreement)
- 4.) Need basic floor plans for existing house to get an accurate bedroom count.
- 5.) Make trenches less angular. Recommend initial system by holes 105 and 106. Modified application rate for 2nd system (from 0.8 to 0.6) based on trench placement (See attached Specs).

Oswald, Hank

From: Oswald, Hank
Sent: Monday, August 20, 2018 10:04 AM
To: Rob Vogel (rvogel@vogeleng.com)
Cc: 'prsjfs@gmail.com'; 'jreynolds@vogeleng.com'
Subject: OSDS Plan_13185 Highland Road_Lot 2
Attachments: BAT Site Plan Requirements_Updated 5.31.17.pdf; O&M agreement 4.23.18.pdf; Septic Specs Sullivan Prop_Lot 2.pdf; OSDS Memo__Sullivan Property Lot 2_2018.pdf

Hi Rob:

Good morning. Please see attached memo for comments pertaining to the septic plan for the Sullivan Property, Lot 2.

Please contact me with any questions.

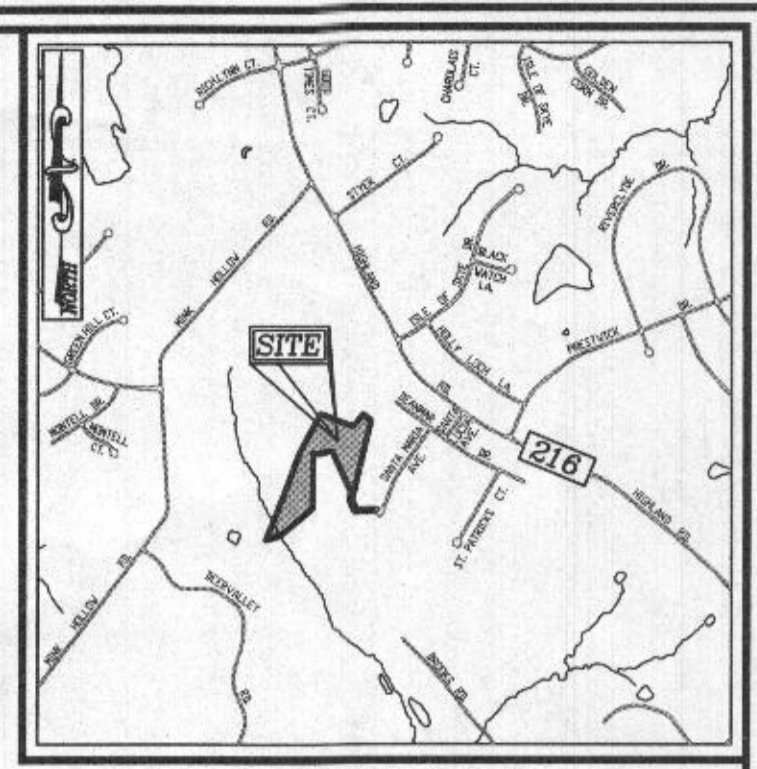
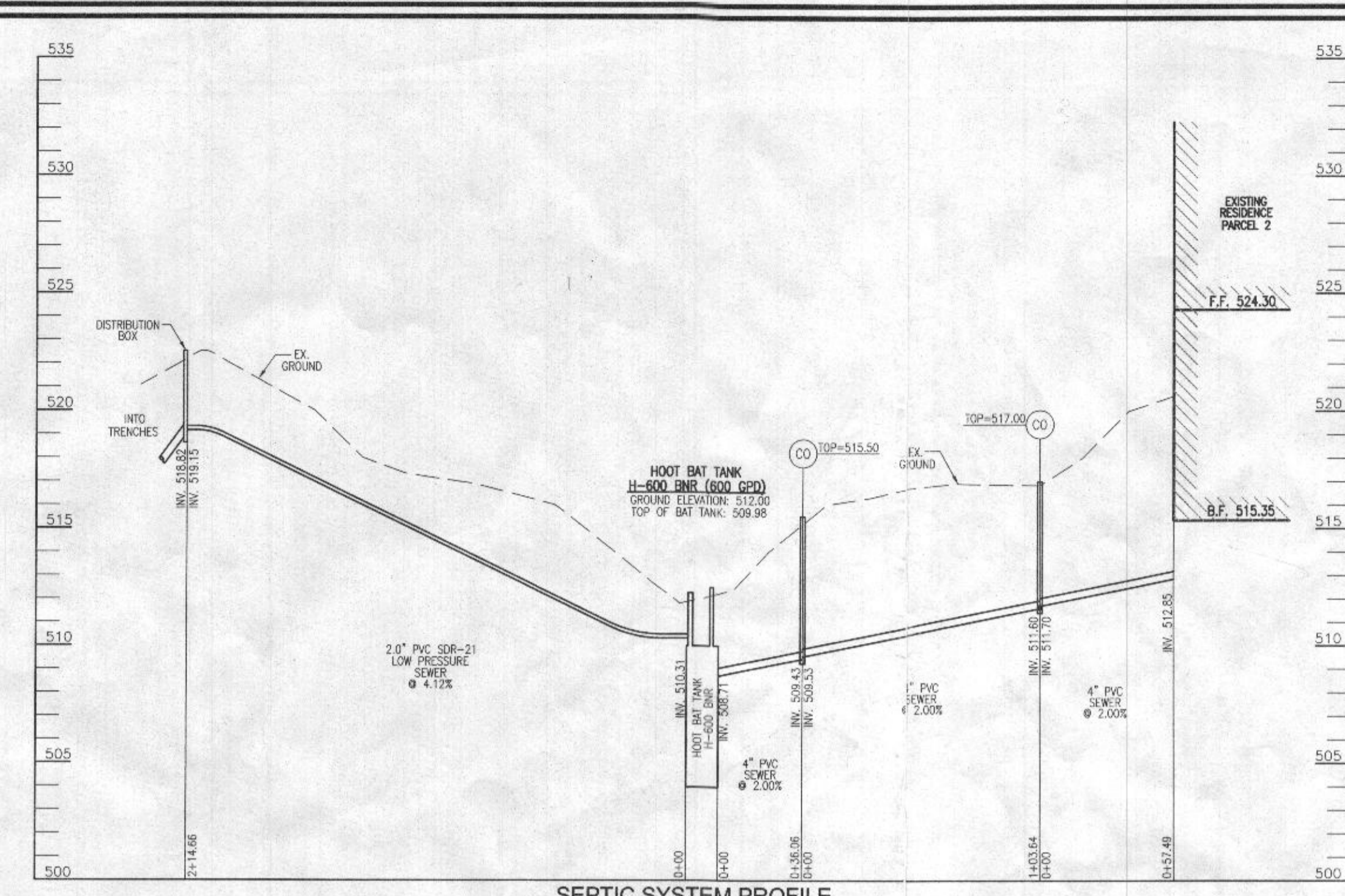
Respectfully,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

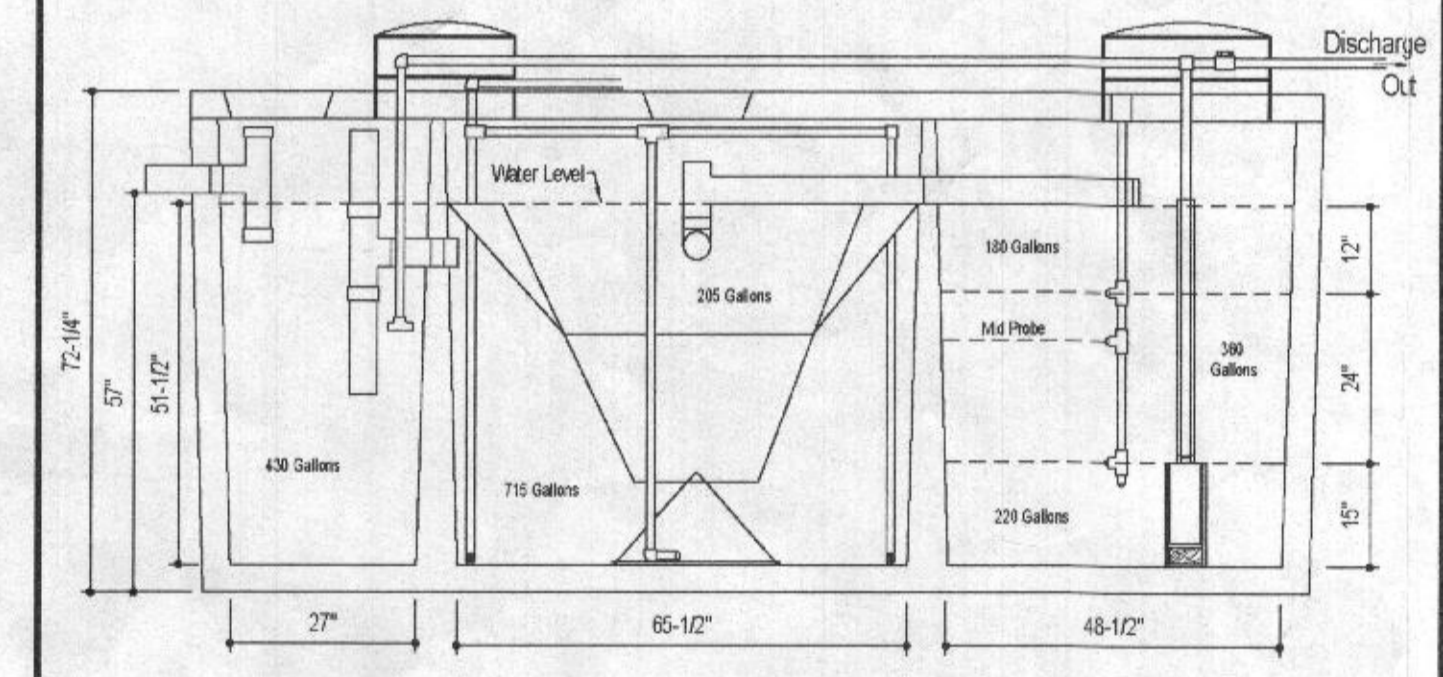
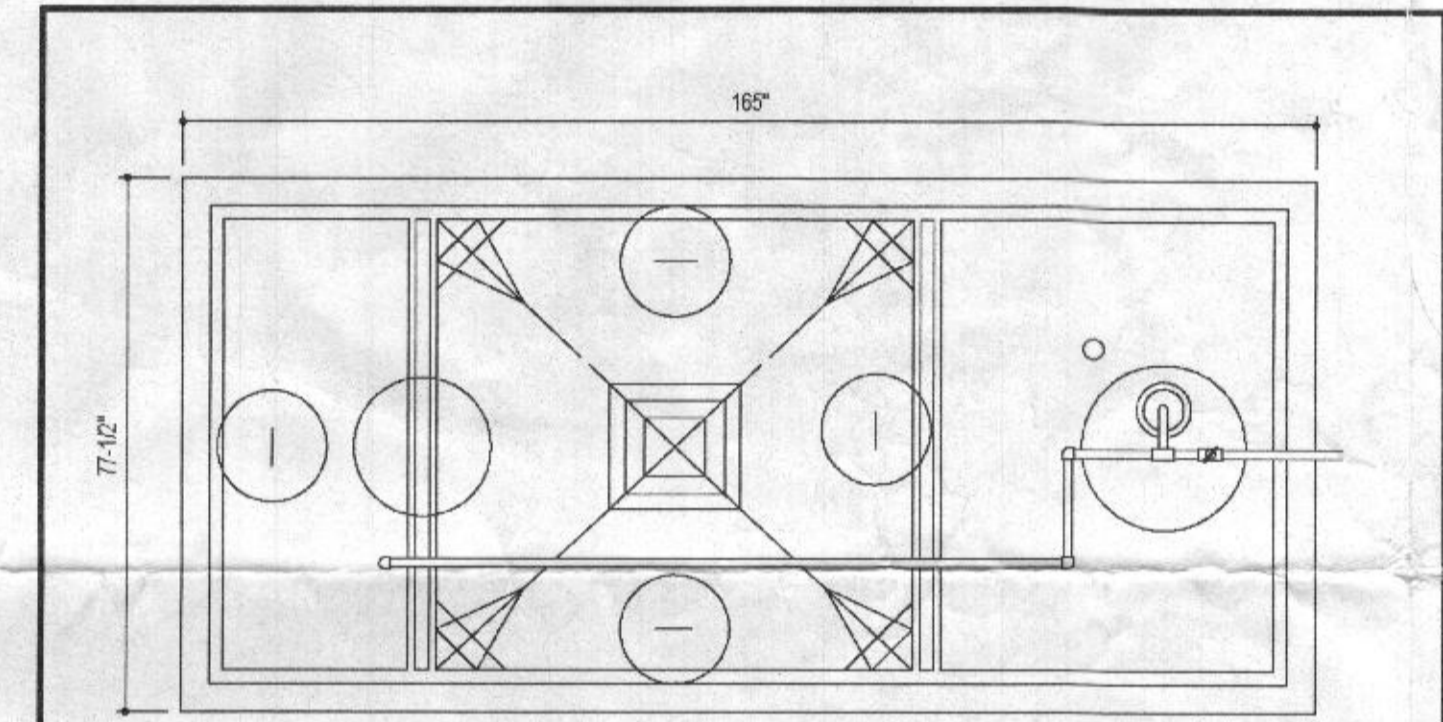
CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.



LEGEND:

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SLOPE (2% SLOPES OF GREATER)
- EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
- EXISTING WELL LOCATION
- ALTERNATE WELL LOCATION
- PASSED PERIC. TEST
- FAILED PERIC. TEST
- APPROVED PRIVATE SDA
- PROPOSED WELL BOX



- GENERAL NOTES:**
- THE EXISTING TOPOGRAPHY IS BASED ON A FIELD RUN TOPOGRAPHICAL SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MAY 05, 2011, AND IS SUPPLEMENTED WITH HOWARD COUNTY GIS.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN USING ALL REASONABLE EFFORTS.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 - THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS THREE FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - NO BLOWER IS REQUIRED. THE HOOT WASTEWATER TREATMENT SYSTEM HAS AN AERATOR MOUNTED IN THE TANK.
 - THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
 - THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
 - WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
 - ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
 - THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.

Approved Septic System Plan
 Howard County Health Department
 Signature: *[Signature]* Date: 9/16/18
 Approved: *[Signature]* Date: 9/16/18
 w/ 750 GPD Pump Chamber

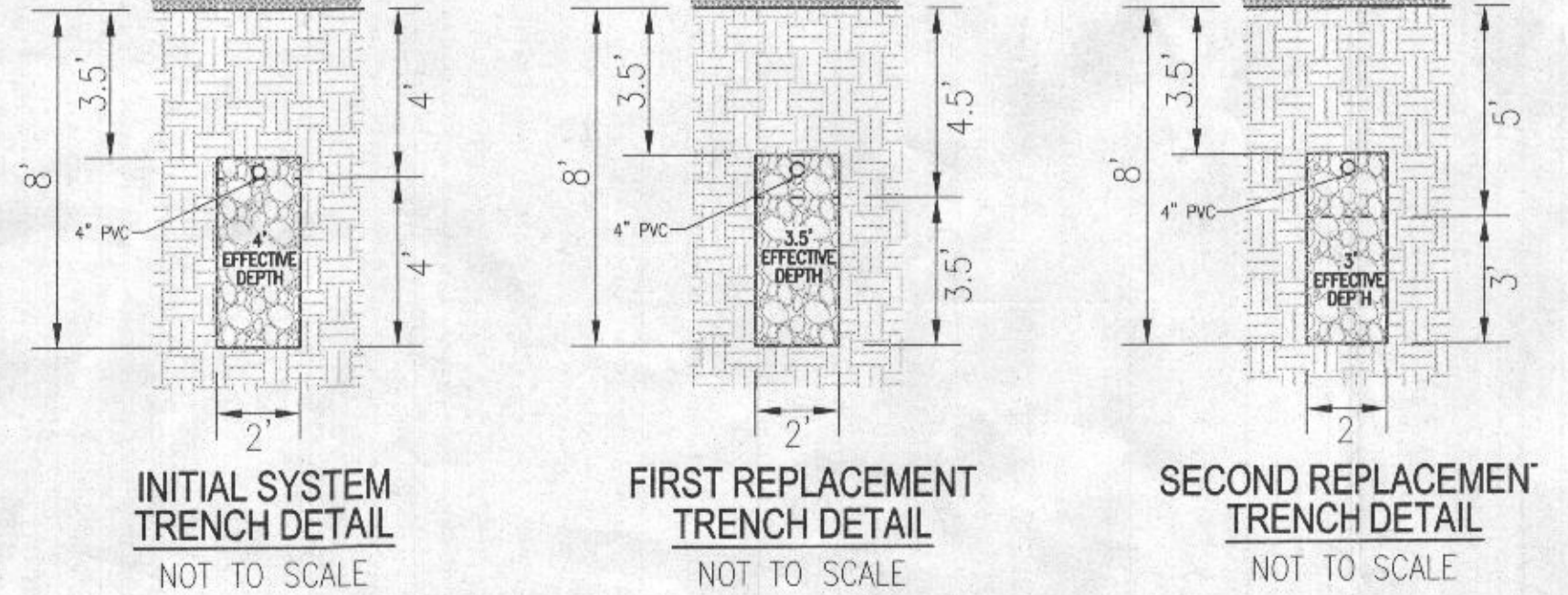
OWNER/DEVELOPER
 PATRICIA SULLIVAN
 3010 N. RIDGE ROAD, C709
 ELLICOTT CITY, MD 221043
 (443) 717-2856

INITIAL SYSTEM TRENCH INFO

TRENCH LENGTH	TRENCH WIDTH	TRENCH DEPTH	TRENCH VOLUME
1	50'	517.73"	513.07'
2	50'	517.07"	513.07'

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN ON THIS PLAN (40-17-0136) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECONSTRUCTION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.



SYSTEM CALCULATIONS:

INITIAL SYSTEM:
 3 BEDROOMS AT 450gpd / 1.2 ABSORPTION RATE = 375 SQ. FT.
 375 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 68 LINEAR FEET
 100 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
 (2 TRENCHES OF 50 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
 3 BEDROOMS AT 450gpd / 0.6 ABSORPTION RATE = 750 SQ. FT.
 750 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 150 LINEAR FEET
 150 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
 (3 TRENCHES OF 50 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
 3 BEDROOMS AT 450gpd / 0.6 ABSORPTION RATE = 750 SQ. FT.
 750 SQ. FT. / 2 (TRENCH WIDTH) x .44 (SIDEWALL REDUCTION) = 165 LINEAR FEET
 165 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
 (2 TRENCHES OF 83 FEET IN LENGTH)

DESIGN DATA & GENERAL NOTES

- Concrete strength $f'c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- Current - Post-tension Type III per ASTM C1584-02.
- Admixtures & plasticizers per ASTM C 260-98 & C 484-02.
- Reinforcing per ASTM A195, Min. 1/4" cover.

Mayer Brothers, Inc.
 6264 Race Road
 Ellicott City, Maryland 21075
 Tel: 410.796.1434
 Fax: 410.796.1439
 www.mayerbrothers.com

600 GPD BNR SYSTEM H-600 BNR
 with 750 GALLON PUMP CHAMBER

Dwg. No. Hoot Form #1	No Scale	March 19, 2009
-----------------------	----------	----------------

SITE PLAN FOR BAT INSTALLATION

SULLIVAN PROPERTY
 PARCEL 2
 13185 HIGHLAND ROAD
 HIGHLAND, MD 20777
 3.01 AC.

L 15527 / F. 137
 5TH ELECTION DISTRICT
 TAX MAP: 34 GRID: 21

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2020.

DESIGN BY: RHV
 DRAWN BY: JMV
 CHECKED BY: RHV
 DATE: SEPTEMBER 2018
 SCALE: AS SHOWN
 W.O. NO.: 15-00

1 SHEET OF 1